MOHAN KUMAR A

Vindhya A-3, 220
Center for Visual Information Technology,
IIIT Hyderabad, India-500033

E-mail: mohankumaar3@gmail.com
Website: mohanarunachalam.github.io
Phone: +91-9603903120

RESEARCH INTERESTS

Computer Vision, Machine Learning, Deep Learning, Document Image Analysis

EDUCATION

Integrated M.E Computer Science(With specialization in Information Security) — 2013 — 2016
BITS Pilani,Hyderabad campus,India
CGPA - 6.9/10

B.Sc,Physics — 2010 — 2013
V.O.C College,Tuticorin,India
CGPA- 8.2/10

WORK EXPERIENCE

Centre for Visual Information Technology,Hyderabad,India — June'17 — Present
Research Intern

CognitiveScale,Hyderabad — July'16 — May'17
Cognitive Engineer

CognitiveScale,Hyderabad — Jan '16 — June '16
Software Developer Intern

BITS Pilani,Hyderabad — Jan '15 — June '15
Teaching Assistant

SELECTED PROJECTS

Image Blend(Dec'17 - Present):

- To merge two images of different persons to create a multi-person photo.
- Pre-processing steps to match the brightness levels of both images.
- Haar based classifiers are used to detect the face of each person.
- Key points in the image are matched using Hamming distance and homography is used to warp both the images.
- Alpha Blending algorithm is used to blend the images together.

Handwritten Assignment Evaluator:(June'17-Present):

- Building a web-app that is used for assignment collection,evaluation and distribution online.

- Technologies used: Python,Django

NASA Space Apps Challenge(April '17):

- Built an app that helps in better visualisation of NASA's data, that help in better learning experience.
- Our team's idea got nominated for the finals,from Hyderabad.

BotHack Hackathon(March '17):

- Worked with a 4 member team to build a chat bot that can help in improving the flight travel experience.
- Idea was to build a chatbot that can reply to people based on the tweets/complaints related to the airline service.

Cognitive Buying Assistant App(July'16 - May'17):

- Worked on dynamic faceted search which involves user query understanding via NLP using domain specific concept extraction.
- Worked on contextual recommendation based on the role assigned to each user using the app.

Lawyer Recommender App(Jan '16 - June'16):

- Based on the user's location or case requirements, the app recommends lawyers who might be a potential match.
- Worked on ETL cycle, which includes scraping data from web,transforming the data into the specified format and loading the extracted data in NoSQL database.
- Worked on enrichment of the loaded data so that any additional data will follow the same structure.
- Worked on loading the data into graph database Neo4j, which helps in representing how connected the data is.

Code Vulnerability Predictor(May '15 - July '15):

- Implemented a Machine learning model to predict the existence of a vulnerability in a code base based on the research work done by Riccardo Scandariato et al..
- Worked on Machine Learning tools like WEKA.

RELEVANT COURSEWORK TAKEN

- CS231n Stanford, taken by Fei Fei LI,Andrej Karpathy,Johnson
- Machine Learning,Coursera by Andrew NG
- Digital Image Processing

SKILLS

Languages: C,Python

Packages & Tools: Scikit,Neo4j,Selenium,Jmeter,numpy,OpenCV

Operating systems: Linux,Windows

VOLUNTEER EXPERIENCE

- Volunteer,Blue Cross of Hyderabad,India.
- Member, World Cube Association.